AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

Listing of the Claims

1.   (Currently Amended) A process for operating a wear-afflicted display having defined pixels, comprising:

assigning ~~in which~~ each pixel ~~is assigned~~ a memory address in a memory element to record ~~the~~ an operating time of each pixel, the pixel being ~~and is~~ integrated over the operating time and operating intensity to determine a pixel wear value (R^{int}, G^{int}, B^{int}); ~~and in which a~~

storing the pixel wear value ~~is stored~~ for each pixel in the form of a non-volatile stored pixel wear value (R^{vn}, G^{vn}, B^{vn}) in a non-volatile memory for each of the three basic colors including red, green, and blue, ~~while~~;

obtaining the non-volatile stored pixel wear value (R^{vn}, G^{vn}, B^{vn}) ~~is obtained~~ as a sum of the most significant bits integrated over the operating time of the pixel of a pixel wear value (R^{vf}, G^{vf}, B^{vf}) that is volatile stored in a volatile memory,

wherein the less significant bits of the volatile stored pixel wear value (R^{vf}, G^{vf}, B^{vf}) are retained unchanged in the volatile memory and the

most significant bits of the volatile stored pixel wear values (R^{vf}, G^{vf}, B^{vf}) are transferred to the non-volatile stored pixel wear values (R^{vn}, G^{vn}, B^{vn}).

2.   (Currently Amended) A process for operating a wear-afflicted display having defined pixels, comprising:~~in which~~

assigning each pixel ~~is assigned~~ a memory address in a memory element to record ~~the~~ an operating time of each pixel, the pixel being ~~and is~~ integrated over the operating time and operating intensity to determine a pixel wear value (R^{int}, G^{int}, B^{int}); ~~and in which~~

storing the~~a~~ pixel wear value ~~is stored~~ for each pixel in the form of a non-volatile stored pixel wear value (R^{vn}, G^{vn}, B^{vn}) in a non-volatile memory for each of the three basic colors including red, green, and blue, ~~while~~;

obtaining the non-volatile stored pixel wear value (R^{vn}, G^{vn}, B^{vn}) ~~is obtained~~ as a sum of the most significant bits integrated over the operating time of the pixel of a pixel wear value (R^{vf}, G^{vf}, B^{vf}) that is volatile stored in a volatile memory,

wherein a correction value (R^{kor}, G^{kor}, B^{kor}) for correcting the respective pixel signal (R, G, B) that is individual to each pixel is stored in the same memory cell (R^{vf}, G^{vf}, B^{vf}) of the volatile memory as the volatile stored pixel wear value (R^{vf}, G^{vf}, B^{vf}), and a characteristic that is

proportional to the respective pixel wear values is stored in <u>at least one of</u> <u>on</u> addition <u>to</u> and<s>or alternatively</s> to the pixel wear values.

3.   (Currently Amended) The process of claim 1, <s>wherein</s> <u>further</u> <u>comprising carrying out</u> a complete transmission of the data that are retained in the volatile memory <s>is carried out</s> in<u>to</u> the non-volatile memory when the display is turned off.

4.   (Currently Amended) The process of claim 1, <s>wherein</s> <u>further</u> <u>comprising rewriting</u> the data that are retained in the non-volatile memory <s>are</s> <s>rewritten</s> into the volatile memory when the display is turned on.

5.   (Currently Amended) The process of claim 1, <s>wherein the</s><u>further</u> <u>comprising operating the</u> display <s>is operated</s> first <u>with</u> uncorrected <u>pixel data</u> and then, after the data <s>has been</s><u>is</u> completely rewritten from the non-volatile memory into the volatile memory, <u>operating</u> the display<s>is operated</s> with [[the]] corrected pixel data (R', G', B') when the display is turned on.

6.   (Previously Presented) The process of claim 1, wherein one or several SDRAM components are used as the volatile memory.

7.　(Previously Presented)　The process of claim 1, wherein at least one of flash components, MRAM, FRAM, FeRAM, RRAM, and PCM components is used as the non-volatile memory.

8.　(Currently Amended)　The process of claim 1, wherein [[the]] respectively recorded volume of data is reduced by one of

reducing the accuracy of the recorded pixel wear values (R^{int}, G^{int}, B^{int}) or that of the characteristics that are proportional to ~~them~~the recorded pixel wer values (R^{int}, G^{int}, B^{int}), and

storing a difference value between the respective pixel wear value (R^{int}, G^{int}, B^{int}) and a predeterminable maximum pixel wear value.

9.　(Currently Amended)　The process of claim 1, wherein the intensity of the individual pixels is increased or decreased separately for each of the basic colors red, green, and blue, in dependence upon at least one of respective individually stored pixel wear values (R^{int}, G^{int}, B^{int}) and characteristics that are proportional to ~~these~~the stored pixel wear values (R^{int}, G^{int}, B^{int}).

10.　(Previously Presented)　The process of claim 9, wherein the increase or decrease of the intensity of the individual pixels is carried out one

of automatically, interactively, and manually in dependence upon

predetermined threshold values.

11.   (Currently Amended) The process of claim 9, ~~wherein~~ further

comprising generating a correction image for the display ~~is generated~~ from the

stored pixel wear values or from ~~the~~ characteristics that are proportional to

~~these~~the stored pixel wear values, whose indication on the display equalizes

[[the]] individually different pixel wear values with a general wear level.

12.   (Currently Amended) The process of claim 11, ~~wherein the~~further

comprising indicating ~~indication of~~ the correction image on the display is

carried out one of automatically, interactively, and manually at

predeterminable times in dependence upon predetermined threshold values of

the pixel wear value or the characteristics that are proportional to the pixel

wear values.

13.   (Currently Amended) The process of claim 11, ~~wherein~~ further

comprising operating selected pixels ~~are operated~~ separately to accelerate ~~the~~

an equalization of [[the]] pixel wear values (R*, G*, B*).

14.   (Currently Amended) The process of claim 1, ~~wherein~~ further comprising adding pixel correction data (R^{kor}, G^{kor}, B^{kor}) predetermined by a logic element ~~are added~~ respectively to the red, green, and blue pixel data (R, G, B), and operating the display ~~is then operated~~ with [[the]] correspondingly corrected pixel data (R', G', B').

15.   (Currently Amended) The process of claim 14, wherein the pixel correction data (R^{kor}, G^{kor}, B^{kor}) are determined with the logic element one of

by evaluating the recorded pixel wear data (R^{int}, G^{int}, B^{int}),

based on [[the]] characteristics dependent from the recorded pixel wear data (R^{int}, G^{int}, B^{int})~~these~~, and

by ~~means of~~ wear characteristic fields stored separately for each of the three basic colors.

16.   (Currently Amended) The process of claim 15, ~~wherein~~ further comprising generating ~~the generation of~~ the pixel correction values (R^{kor}, G^{kor}, B^{kor}) ~~is carried out only~~ at defined time intervals.

17.   (Currently Amended) The process of claim 15, wherein ~~the~~ ~~determination of~~ determining the pixel correction data (R^{kor}, G^{kor}, B^{kor}) is carried out in dependence upon at least one of an individual phosphorous

characteristic of the display, an overall brightness of the display, an overall brightness of the display in the basic colors red, green, and blue, an operating temperature of the display and a color temperature of the display.

18.   (Currently Amended) The process of ~~claim 1~~claim 14, wherein the display is a master display, the memory element is upgraded in a first step with the volatile and the non-volatile memory, and the display is then additionally operated initially uncorrected with a defined image and is evaluated with regard to the individual wear characteristic of the display, and the individual pixel wear values ((R^{int}, G^{int}, B^{int}) are transmitted to the memory elements, the correction data (R^{kor}, G^{kor}, B^{kor}) are determined by means of the logic element(s) that are upgraded if necessary, and are then operated with the corrected image values (R', G', B') to equalize the wear on the display at the individual pixels.

19.   (Currently Amended) The process of claim 1, ~~wherein~~further comprising ~~the~~scaling graphic data shown on the display ~~are scaled~~by an adaptation of [[the]] one of a respectively represented resolution to [[the]]a format of [[the]]a physical resolution of the display or by ~~way of~~[[the]] deinterlacing.

20.   (Previously Presented) The process of claim 1, wherein the adaptation of different width-to-height ratio of the video source and the display is integrated in the logic element as well as in the process.

21.   (Currently Amended) The process of ~~claim 1~~claim 15, wherein the display comprises a plasma ~~pulse~~ generator, in which the corrected pixel values (R', G', B') determined by the logic element are allocated to the plasma pulse generator and an individual brightness control of the pixels of the display is carried out for each pixel by the plasma pulse generator.

22.   (Currently Amended) The process of ~~claim 1~~claim 15, wherein the display comprises a plasma pulse generator, in which the pixel correction values (R^{kor}, G^{kor}, B^{kor}) determined by the logic element are allocated to this plasma generator, while the pixel data (R, G, B) are ~~otherwise~~ supplied unchanged to an RGB graphic data input of the display and an individual brightness control of the pixels of the display is carried out ~~preferably~~ for each pixel by ~~means of~~ the plasma pulse generator.

23.   (Currently Amended) The process of claim 1 operated in combination with at least one of image shifting, brightness reduction of stills,

and the use of inverse images, while the process is operated ~~in the sense of~~by a

control circuit ~~that is~~connected downstream.

24.   (Currently Amended) The process of ~~claim 1~~claim 14, wherein the

logic element directly processes multiplexed data.

25.   (Currently Amended) The process of claim 1, wherein controls for

limiting the maximum brightness of the display are taken into consideration in

that the process receives [[the]] information from ~~the~~a_control mechanism of

the display ~~and/or~~and reproduces this mechanism ~~and/or~~and carries out the

control on its own.

26.   (Currently Amended) The process of ~~claim 1~~claim 14, wherein the

display is activated less within ~~the~~a_first operating time at least by sections

with the aid of the corrected pixel values (R', G', B') and is ~~only~~increasingly

more frequently activated at a subsequent operating time with the aid of the

corrected pixel values (R', G', B').

27.   (Previously Presented) The process of claim 26, wherein selected

pixels are increasingly more frequently activated within the first operating time.

28.   (Currently Amended) The process of ~~claim 1~~claim 14, wherein a process for gamma correction is applied in the logic element and integrated into the process.

29.   (Currently Amended) A wear-afflicted display, comprising: ~~having~~ a plurality of ~~pixels,~~pixels;

~~with~~ a logic element connected to the display; and

a memory element, ~~the memory element having~~including a volatile memory and a non-volatile memory,

wherein the logic element is configured to determine a pixel wear value (R^{int}, G^{int}, B^{int}) that is individual to each of the plurality of pixels~~pixel is~~, the pixel wear value (R^{int}, G^{int}, B^{int}) being stored in the volatile memory for each basic color including red, green, and blue, ~~wherein~~the pixel wear value (R^{int}, G^{int}, B^{int}) ~~represents~~representing one of an operating time and an operating intensity of ~~the~~a respective pixel (R, G, B) of the display, and

wherein the logic element is further configured to determine a pixel correction value (R^{kor}, G^{kor}, B^{kor}) that is individual to each pixel, the pixel correction value (R^{kor}, G^{kor}, B^{kor}) being~~is~~ stored in the volatile memory for each basic color red, green, and blue, for the correction of the respective pixel signal (R, G, B),

wherein the pixel wear value (R^{int}, G^{int}, B^{int}) and the pixel correction value (R^{kor}, G^{kor}, B^{kor}) ~~are~~being stored in ~~the~~a same memory cell ((R^{vf}, G^{vf}, B^{vf}) of the volatile memory, and

wherein characteristics that are proportional to the respective pixel wear values are stored in one of in addition to or ~~alternatively~~to the pixel wear values.

30.   (Currently Amended) A wear-afflicted display, comprising:~~having~~ a plurality of pixels;~~pixels, with~~

a logic element connected to the display; and

a memory element, ~~the memory element having~~including a volatile memory and a non-volatile memory,

wherein the logic element is configured to determine a pixel wear value (R^{vn}, G^{vn}, B^{vn}), the pixel wear value (R^{vn}, G^{vn}, B^{vn}) being ~~is~~ non-volatile stored in the non-volatile memory for each basic color including red, green, and blue,

wherein the non-volatile stored pixel wear value (R^{vn}, G^{vn}, B^{vn}) corresponds to a sum of the most significant bits of a volatile stored pixel wear value (R^{vn}, G^{vn}, B^{vn}) integrated over the operating time of the pixel, and

wherein the less significant bits of the volatile stored pixel value (R^{vf}, G^{vf}, B^{vf}) are retained unchanged in the volatile memory.

31.   (Currently Amended) The display of claim 29, further comprising a plasma pulse generator ~~for controlling~~configured to control a brightness of the display, based on the pixel correction values (R^{kor}, G^{kor}, B^{kor}) determined ~~by means of~~ based on the pixel wear values (R^{int}, G^{int}, B^{int}) recorded in the memory element or the characteristic corresponding thereto are forwarded to the plasma pulse generator, while ~~at the same time the~~ otherwise unchanged graphic data (R, G, B) are applied at ~~the~~an RGB input of the display.

32.   (Currently Amended) The display of claim 29, wherein in the case in which display technologies are used, in which individual colors have different wear characteristics, selected colors are applied with a relatively higher color and/or light component in comparison with [[the]] other colors.

33.   (Currently Amended) The display of claim 29, wherein the logic of a graphic controller is integrated in the logic element so that the volatile memory for ~~the~~a graphic controller and the logic element are jointly usable.

34.   (Cancelled)